

AMENDMENTS TO THE CLAIMS:

This listing of claims will replace all prior versions, and listings, of claims in the application:

1. (Currently Amended) A method of measuring the differences between a first video signal and a second video signal, said method comprising ~~the steps of:~~
~~analysing (31) the~~analyzing information content of each video signal to identify the perceptually relevant boundaries of the video images depicted therein;
comparing ~~the~~ boundaries so defined in the first signal with those in the second signal; the comparison including determination of the extent to which the properties of ~~the~~ boundaries defined in the first image are preserved in the second image; and
generating an output indicative of the perceptual difference between the first and second signals.
2. (Currently Amended) A method ~~according to~~as in Claim 1, in which the information content is ~~analysed~~analyzed for a plurality of boundary-identifying characteristics ~~(32, 32d)~~, and the properties of the boundaries on which the comparison is based include the characteristics by which such boundaries are defined in each of the signals.
3. (Currently Amended) A method ~~according to~~as in claim 2, wherein the characteristics include the presence of edges.

4. (Currently Amended) A method ~~according to~~as in claim 2, wherein the characteristics include the presence of disparities between frames of the same signal.

5. (Currently Amended) A method ~~according to~~as in claim 2, wherein the characteristics include changes in at least one of the properties of: luminance, ~~colour~~color or texture.

6. (Currently Amended) A method ~~according to~~as in claims 1, in which the comparison includes a comparison of the perceptibility of corresponding boundaries identified in the first and second signals.

7. (Currently Amended) A method ~~according to~~as in claim 1, in which the comparison of the images includes ~~the steps of:~~
identification of the principal elements in each image, and
compensation for differences in the relative positions of the said principal elements.

8. (Currently Amended) A method ~~according to~~as in claim 1, in which the analysis includes identification of perceptually significant image features, and the output indicative of the perceptual difference between the first and second signals is weighted according to the cognitive relevance of such image features.

9. (Currently Amended) A method ~~according to~~as in claim 8, in which the perceptually significant image features are those characteristic of the human face.

10. (Currently Amended) A method ~~according to~~as in claim 9, in which a weighting is applied to the output according to the significance of the feature in providing visual cues to speech.

11. (Currently Amended) A method ~~according to~~as in claim 8, in which the perceptually significant image features are those by which individual text characters are distinguished.

12. (Currently Amended) Apparatus for measuring the differences between a first video signal and a second video signal, said apparatus comprising:

analysis means for ~~the~~processing information content of each video signal to identify the perceptually relevant boundaries of the video images depicted therein;

comparison means for comparing the boundaries so defined in the first signal with those in the second signal; the comparison including determination of the extent to which the properties of the boundaries defined in the first image are preserved in the second image; and

~~and~~ means for generating an output indicative of the perceptual difference between the first and second signals.

13. (Currently Amended) Apparatus ~~according to~~as in Claim 12, wherein:
the analysis means is arranged to ~~analyse~~analyze the information content in the signals for a plurality of boundary-identifying characteristics, and

the comparison means is arranged to compare the characteristics by which such boundaries are defined in each of the signals.

14. (Currently Amended) Apparatus ~~according to~~ as in claim 13, wherein the analysis means includes means to identify the presence of edges.

15. (Currently Amended) Apparatus ~~according to~~ as in claim 13, wherein the analysis means includes means to identify the presence of disparities between frames of the same signal.

16. (Currently Amended) Apparatus ~~according to~~ as in claim 13, wherein the analysis means includes means to identify differences in at least one of the properties of: luminance, ~~colour~~ color or texture.

17. (Currently Amended) Apparatus ~~according to~~ as in claim 12, in which the comparison means includes means for determining the perceptibility of the boundaries identified in the first and second signals.

18. (Currently Amended) Apparatus ~~according to~~ as in claim 12, in which the comparison means includes image matching means for ~~identification~~ identifying of the principal elements in each image and translation means for effecting translation of one image to compensate for differences in the relative positions of such elements in the first and second images.

19. (Currently Amended) Apparatus ~~according to~~as in claim 12, in which the comparison means includes weighting means for identifying perceptually significant image features ~~in the components~~, and weighting the output according to ~~the~~ cognitive relevance of such image features.

20. (Currently Amended) Apparatus ~~according to~~as in claim 12, further comprising:

visual stage means for processing original input signals to emulate the response of the human visual system;and to generate modified input signals for input to the analysis means.